

LOCKHEED AIRCRAFT CORPORATION		ENGINEERING STUDY <input checked="" type="checkbox"/>	LAC - 194							
DATE 8-21-64		AFFECTS: WSPO <input checked="" type="checkbox"/>	PROJECT <input checked="" type="checkbox"/>							
NAME OF MAJOR COMPONENT Cockpit Mock-up	PART OR LOWEST SUBASSEMBLY		PART NO. & MODEL OR TYPE							
TITLE OF PROPOSAL : DYNAMIC CANOPY EJECTION TESTS										
NATURE OF PROPOSAL : SEE PAGE 2										
REASON FOR PROPOSAL : To determine the effect of dynamic pressure on canopy and seat ejection  <i>This covers work already accomplished</i> <i>P.</i>										
ES	ESTIMATED COST AND TIME INVOLVED : See Page 3									
ADDITIONAL FUNDING REQUIRED : No. SP-1923 COMMON										
CP	ESTIMATED COST FOR KITS OR PARTS :									
ADDITIONAL FUNDING REQUIRED :										
ITEMS AFFECTED BY PROPOSAL :										
SAFETY <input type="checkbox"/>	MISSION-EFFECTIVENESS <input type="checkbox"/>	PERFORMANCE <input checked="" type="checkbox"/>	OPERATING PROCEDURE <input type="checkbox"/>	INTER-CHANGEABILITY <input type="checkbox"/>	WEIGHT OR WEIGHT & BALANCE <input type="checkbox"/>	TOOLS & SUPPORT EQUIPMENT <input type="checkbox"/>	MAINTENANCE PROCEDURE <input type="checkbox"/>	SERVICE LIFE <input type="checkbox"/>	FLIGHT MANUAL <input type="checkbox"/>	MAINTENANCE MANUAL <input type="checkbox"/>
EST. MAN/HRS. REQ'D. TO ACCOMPLISH CHANGE IN FIELD										
SOURCE OF PARTS FOR <del>TEST</del> TEST LAC				AVAILABILITY _____ WEEKS AFTER APPROVAL See Page 3						
DISPOSITION OF SPARES AFFECTED										
INITIATED BY : Customer				APPROVED : WSPO						

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NATURE OF PROPOSAL:

It is proposed to test the canopy ejection system under dynamic (air) load conditions. Although primary interest is in the effect of dynamic pressure on the action of the canopy when ejected, it is proposed that a weighted seat be ejected also to demonstrate seat-canopy clearances during ejection.

Dynamic pressure will be imposed during the tests by making ejections at approximately 75 MPH from a moving vehicle. Five ejections are anticipated; one with canopy only and four with canopy and weighted seat. All shots will be photographed by the LAC photo department.

A flat bed truck will be leased for a period of approximately three weeks and the existing cockpit mock-up with a production canopy and seat ejection systems will be installed on the truck bed.

It is anticipated that installation of the mock-up on the truck, and all preparatory work will be done at the Van Nuys facility. Tests will be conducted at EAFB North Base.

Equipment required for tests:

- (a) Cockpit mock-up with ejection systems installed (LAC)
- (b) Ejection seats (2) with approximately 180 lbs. of weight (GFAE)
- (c) Three canopies to latest configuration (GFAE)
- (d) Flat bed truck (leased)
- (e) Pyrotechnics as required for five canopy ejections and four seat ejections (GFAE)

Note: It is anticipated that seat assemblies will be extensively damaged during testing and therefore will not be repaired.

COST BREAKDOWN:

Contract SP-1923 "Common"

Installation, Tests & Evaluation

[Redacted] 25X1

SCHEDULE:

Testing to be complete by 8-21-64.